### **Tree Status**

- **H Healthy** tree with very little biotic or abiotic damage.
- U Unhealthy tree with some biotic or abiotic damage, and this damage will reduce growth. However, it appears the tree will fully recover from this damage.
- **S Sick** tree with extensive biotic or abiotic damage and this damage will ultimately cause death within the next 5-10 years.
- **D Dead** tree or snag with no living tissue visible.

### **Crown Class**

- O Open grown, or the tree is not near any other tree
- **E Emergent**, or the crown is totally above the canopy of the stand
- **D Dominant**, or the crown receives light from at least 3-4 directions
- C Codominant, or the crown receives light from at least 1-2 directions
- I Intermediate, or the crown only receives light from the top
- S Suppressed, or the crown is entirely shaded and underneath the stand canopy

### Live Crown Ratio and Crown Scorch Classes

	Classes
Code	Live Crown Percent
0	Zero percent
0.5	>0-1 percent
3	>1-5 percent
10	>5-15 percent
20	>15-25 percent
30	>25-35 percent
40	>35-45 percent
50	>45-55 percent
60	>55-65 percent
70	>65-75 percent
80	>75-85 percent
90	>85-95 percent

## **Mortality Codes**

Mortality	Description
Code	
F	Fire caused
I	Insect caused
D	Disease caused
A	Abiotic (flooding, erosion)
Н	Harvest caused
U	Unable to determine
X	Did not assess

**Snag Code Descriptions** 

Snag				_	
Code	Limbs	Top of Bole	Bark	Sapwood	Other
1	All present	Pointed	100% remains	Intact	Height intact
2	Few, limbs	May be broken	Some loss, variable	Some Decay	Some loss in height
3	Limb stubs only	Usually broken	Start of sloughing	Some sloughing	Broken top
4	Few or no limb stubs	Always broken some rot	50% or more loss of bark	Sloughing Evident	Loss in height always
5	No limbs or	Broken and usually	20% bark	Sapwood gone	Decreasing height with rot
1	limb stubs	rotten	remaining		

**Damage and Severity Codes - Short List** 

Damage	Description	Severity Code		
Code				
00000	No Damage	No Damage		
10000	General Insects	101 – Minor – Bottlebrush or shortened leaders or <20% of branches affected, 0 - 2 forks on stem or <50% of the bole with larval galleries 102 – Severe – 3 or more forks on bole, or 20% or more branches affected or terminal leader dead or 50% or more ion the bole with visible larval galleries.		
19000	General	191 – Minor – Short-term tree vigor probably not affected		
19000	Diseases	192 – Severe – Tree vigor negatively impacted in the short-term		
25000	Foliage Diseases	251 – Minor – <20% of the foliage affected or <20% of crown in brooms.  252 – Severe - >20% of the foliage affected or >20% of the crown in brooms.		
50000	Abiotic Damage	501 – Minor – <20% of the crown affected, bole damage is <50% circumference.  502 – Severe - >20% of the crown affected bole damage is >50% circumference.		
90000	Unknown	900 – 0-9% affected 901 – 10-19% affected 902 – 20-29% affected 903 – 30-39% affected 904 – 40-49% affected 905 – 50-59% affected 906 – 60-69% affected 907 – 70-79% affected 908 – 80-89% affected 909 – 90-99% affected		

## **Sapling Classes**

Midpoint Diameter Class (in.)		Midpoint Diameter Class (cm)	
Class	Diameter Range	Class	Diameter Range
0.5	>0 - 1	1.2	>0 - 2.5
1.5	>1 - 2	3.8	>2.5 - 5
2.5	>2 - 3	6.2	>5 - 7.5
3.5	>3 - 4	8.8	>7.5 - 10

# **Seedling Classes**

Midpoint Height Class (ft)		Midpoint Height Class (m)	
Class	Height Range	Class	Height Range
0.2	>0.0 - 0.5	0.1	>0.0 - 0.2
1	>0.5 – 1.5	0.3	>0.2 - 0.5
2	>1.5 – 2.5	0.6	>0.5 - 0.8
3	>2.5 – 3.5	0.9	>0.8 – 1.0
4	>3.5 – 4.5	1.2	>1.0 – 1.4

## Precision

Component	Standard
DBH	<u>+</u> 0.1 in./0.25 cm
Height	<u>+</u> 1 ft/0.3 m
Live crown ratio	± 1 class
Crown fuel base height	<u>+</u> 1 ft/0.3 m
Crown class	±1 class
Age	± 10 percent of total years
Growth rate	<u>+</u> 0.01 in./0.1 mm
Decay class	±1 class
Mortality code	Best guess
Damage code	Appropriate category
Severity code	±1 severity class
Char height	<u>+</u> 1 ft/0.3 m
Crown scorch	±1 class
Count	± 10 percent of total count
Average height (saplings)	<u>+</u> 1 ft/0.3 m
Average live crown percent	±1 class